

Title (en)  
ADHESION PROMOTERS

Publication  
**EP 0088527 B1 19870722 (EN)**

Application  
**EP 83300754 A 19830215**

Priority  
GB 8204511 A 19820216

Abstract (en)  
[origin: EP0088527A2] An adhesion promoter for promoting the adhesion of a reduced polymerizable composition to a substrate, particularly for promoting the adhesion of radical polymerizable dental composition to tooth material, comprises a polyethylenically unsaturated monophosphate or salt thereof, the unsaturated monophosphate containing a monophosphate radical of the formula: and at least three ethylenically unsaturated groups per molecule. Preferred polyethylenically unsaturated phosphates are monophosphates of polyhydric alcohols containing at least four hydroxyl groups in which at least three hydroxyl groups are esterified with an ethylenically unsaturated carboxylic acid. Especially preferred unsaturated phosphates, which are provided as a feature of the invention, are those of the formula: in which R is an aliphatic radical (which may be interrupted by one or more oxygen atoms), or a cycloaliphatic or aryl radical having a valency of R + 1 and containing from 4 to 16 carbon atoms; R<sup>1</sup> is a hydrogen or halogen atom or a cyano of C<sub>1</sub>-C<sub>3</sub> alkyl group; and n is an integer of at least 3. The polyethylenically unsaturated monophosphate may be first applied to the substrate, e.g. as a volatile organic solvent solution thereof, and the reduced polymerizable material then applied to the substrate and polymerized thereon. Alternatively, the polyethylenically unsaturated monomer may form part of a radical polymerizable dental filling material applied to tooth material.

IPC 1-7  
**A61K 6/08**; C08L 43/02; C07F 9/09

IPC 8 full level  
**A61K 6/00** (2006.01); **C07F 9/09** (2006.01)

CPC (source: EP US)  
**C07F 9/091** (2013.01 - EP US)

Cited by  
EP0333503A3; EP1462080A1; EP0161386A3; US4816495A; EP0183027A3; US4657941A; EP0161337A3; US6245872B1; WO0067701A1; US6660785B2; US6407148B1

Designated contracting state (EPC)  
CH DE FR GB IT LI NL SE

DOCDB simple family (publication)  
**EP 0088527 A2 19830914**; **EP 0088527 A3 19840718**; **EP 0088527 B1 19870722**; CA 1198444 A 19851224; DE 3372574 D1 19870827; DE 88527 T1 19840105; US 4514342 A 19850430

DOCDB simple family (application)  
**EP 83300754 A 19830215**; CA 421653 A 19830215; DE 3372574 T 19830215; DE 83300754 T 19830215; US 46477883 A 19830207